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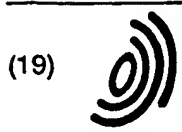
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(54) Pin charge corotron with optimum dimensions for minimum ozone production

(57) A charging apparatus (76) for applying a uniform electrostatic charge to a charge retentive surface is provided. The apparatus includes a housing and an array of pin electrodes (346) supported by the housing and positioned adjacent the surface in a non-contact relationship. The apparatus also includes a generally U shaped shield (312) connected to the housing and at least partially surrounding the array of pin electrodes. The apparatus also includes a grid (336) positioned across distal ends of the shield. The grid (336) defines an effective charge length and an effective grid width. The apparatus also includes a power supply operatively coupled to the pin electrodes for supplying a predetermined current to each of the pin electrode. The power supply provides a predetermined voltage to the grid. At least one of the magnitude of the current, the magnitude of the voltage, the effective charge length, and the effective grid width being selected so as to optimize the charge uniformity, to minimize the sensitivity to photoreceptor grid sensitivity, and to minimize the ozone generated within the charging apparatus.

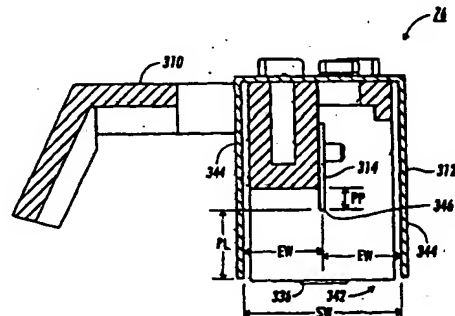


FIG. 8

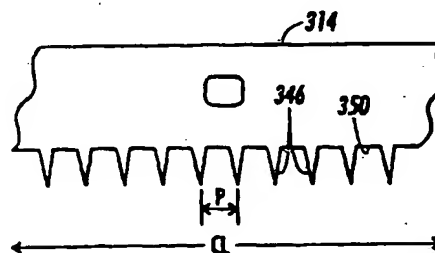


FIG. 9

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Application Number
EP 98 12 1377

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| The present search report has been drawn up for all claims | | | |
| Place of search THE HAGUE | | Date of completion of the search 7 March 2000 | Examiner de Vries, A. |
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